
Name of Organization: Great Lakes Commission

Type of Organization: Interstate Agency or Commission

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Project Title: Online Recreational Guide for Preventing Spread of ANS

Project Category: Exotic Species

Rank by Organization (if applicable): 0

Total Funding Requested (\$): 52,288 **Project Duration:** 2 Years

Abstract:

Recent years have seen the development of multiple products designed to advance aquatic nuisances species (ANS) prevention and control efforts by targeting recreational pathways of introduction and spread. Principal among them is a 1999 set of voluntary guidelines approved by the national Aquatic Nuisance Species Task Force. These and other products hold potential if, and only if, the gap between publication and public accessibility can be eliminated. To fill this well documented unmet need, the Great Lakes Commission will develop and publicize an online guide for anglers, boaters and others engaged in water-based recreation. It will be continuously updated, expanded and marketed to ensure broad coverage and use.

Geographic Areas Affected by the Project

States:

<input checked="" type="checkbox"/> Illinois	<input checked="" type="checkbox"/> New York
<input checked="" type="checkbox"/> Indiana	<input checked="" type="checkbox"/> Pennsylvania
<input checked="" type="checkbox"/> Michigan	<input checked="" type="checkbox"/> Wisconsin
<input checked="" type="checkbox"/> Minnesota	<input checked="" type="checkbox"/> Ohio

Lakes:

<input type="checkbox"/> Superior	<input type="checkbox"/> Erie
<input type="checkbox"/> Huron	<input type="checkbox"/> Ontario
<input type="checkbox"/> Michigan	<input checked="" type="checkbox"/> All Lakes

Geographic Initiatives:

☒ Greater Chicago ☒ NE Ohio ☒ NW Indiana ☒ SE Michigan ☒ Lake St. Clair

Primary Affected Area of Concern: All AOCs

Other Affected Areas of Concern:

For Habitat Projects Only:

Primary Affected Biodiversity Investment Area:

Other Affected Biodiversity Investment Areas:

Problem Statement:

More than one-third of the documented nonindigenous aquatic species in the Great Lakes have been introduced in the past 35 years. This is a likely result of ballast transfer due to more and larger vessel traffic through the lakes via the St. Lawrence Seaway. Another significant factor, however, is human-assisted transport and unintentional introduction of non-native plants and animals. Numerous hard copy materials (notably by Sea Grant and others) and several excellent web sites including the Great Lakes Information Network (GLIN), and Sea Grant's Nonindigenous Species site (SGNIS) and National Aquatic Nuisance Species Clearinghouse – assist the public in learning about invasive species. However, an easily accessible, practical guide to prevention and control techniques does not exist, despite a very obvious and growing need for this information.

Obstacles to changing public behavior with regard to invasive species include: 1) a lack of comprehensive (multi-species) guidelines that state and federal agencies can recommend to the public to minimize ANS spread; 2) large variations between state and local prevention guidelines because they are often developed independently; and 3) growing evidence that recreational users of the Great Lakes (boaters, anglers, etc.) do not practice ANS prevention techniques unless they are educated about the precautions.

In 1999, the federal ANS Task Force approved a set of national voluntary guidelines to reduce recreational pathways associated with the spread of ANS. This effort, led by a Recreational Activities Committee with assistance from the Great Lakes Panel on Aquatic Nuisance Species, involved numerous organizations representing the interests of boaters, anglers and marine retailers. Implementing these guidelines is an essential step toward effecting public action and decreasing the inadvertent transport of invasive species. Still, the void between establishing these guidelines and making them widely available to the public persists.

Developing and promoting these voluntary guidelines is just one example of how the proposed online Guide will compensate for many of the shortcomings of traditional hard copy information/education materials. For example:

Hard copy publications are quickly out of date and often not updated in a timely manner because of prohibitive cost and staffing requirements; and

Hard copy guidelines offer limited accessibility (i.e., printed publications typically must be ordered or requested from the publisher and consequently there's a time and space, and sometimes cost, barrier to accessing the information).

An online guide will greatly increase the effectiveness, use and longevity of the voluntary guidelines and other materials of interest to the Great Lakes St. Lawrence boating, fishing and water-based recreation communities.

Proposed Work Outcome:

This project involves development of an Online Guide for Great Lakes anglers, boaters and others engaged in water-based recreation. The emphasis will be on practical actions they can take with regard to ANS prevention and control. Such a guide will enhance the already popular GLIN section on "Exotic Species in the Great Lakes Region," thus allowing

a visitor to immediately view and download practical tips for identifying and preventing the introduction/spread of ANS within and beyond the Great Lakes St. Lawrence system. The Guide will be fully interactive, providing seamless linkages with related data, studies, graphs and images, thereby providing much-needed context for the prevention and control guidelines. In addition, the Guide will illustrate trends and relationships between ANS dispersal, and prevention and control methods. Online media is multidimensional in nature, so it lends itself particularly well to the presentation and exploration of practical, real-life questions (e.g., "I know what a zebra mussel looks like, but what do I do if I find one on my boat?").

A five-step methodology is proposed:

- A) Preliminary Research/Inventory: A project advisory committee, comprised of a cross-section of Great Lakes interests (primarily ANS information/education specialists) will guide this effort. A substantial amount of time will be directed at identifying existing ANS recreational guidelines and their availability, both online and in print. This will include updating the publication "Aquatic Nuisance Species Information and Education Materials Relevant to the Great Lakes Basin," a descriptive inventory initially published by the Great Lakes Panel on Aquatic Nuisance Species in 1997. This comprehensive list of teaching tools, ANS identification guides and educational references has been a popular product of the Great Lakes Panel. Its development as a searchable online database will greatly promote the many print and electronic educational materials already available from Great Lakes Sea Grant offices, state DNRs, the U.S. Fish & Wildlife Service, and the region's research laboratories, among others. This will be a springboard for development of the online Guide.
- B) Expert Consultation: The Commission will work closely with the national ANS Task Force and the Great Lakes Panel on Aquatic Nuisance Species in developing content for the online Guide, which largely will be based on the national Voluntary Guidelines for Preventing the Spread of Aquatic Nuisance Species (approved by the ANS Task Force in 1999). Members of the advisory committee will review all proposed content for the Guide, as well as site design.
- C) Design and Establish Internet Presence: Once common goals and objectives and resource needs have been identified, the Commission will develop and design an online forum for this information exchange. In addition to recommended voluntary guidelines, other components of the Online ANS Recreational Guide will include: 1) Maps and GIS coverages that illustrate the current spread of invasive species in the Great Lakes-St. Lawrence system. This will involve collaboration with the U.S. Geological Survey, which currently makes these maps available in hard copy and limited digital form; 2) a searchable, online database of "Aquatic Nuisance Species Information and Education Materials Relevant to the Great Lakes Basin"; 3) specialized teaching tools and related resources for educators in the Great Lakes St. Lawrence region and beyond. This "virtual library" will be a timely and popular addition to the "TEACH Great Lakes" site that will be unveiled as part of GLIN in 2000.
- D) Publicity and Dissemination: Promotion of the online Guide will greatly enhance the accessibility of all existing and future ANS information/education resources (both hard copy and online). This information will be made fully accessible for Great Lakes anglers, boaters and others engaged in water-based recreation. The ultimate goal is to influence their actions to curb ANS spread. Integration of the Guide within GLIN will ensure more traffic to the site given that GLIN is a well-known, high quality resource within the Great Lakes basin. The GLIN Exotic Species section is one of the network's most popular areas, averaging more than 20,000 visits/month.
- E) Maintenance and Update: The Commission will maintain and update the Guide as needed, with input from the advisory committee and other ANS partners.

Project Milestones:**Dates:**

Project Start	10/2000
Preliminary Research	01/2001
Expert Consultation	07/2001
Design and Establish Internet Presence	07/2001
Publicity and Dissemination	09/2002
Maintenance and Update	09/2002
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Project End	09/2002

☒ Project Addresses Environmental Justice

If So, Description of How:

Advancing ANS prevention and control efforts will yield basinwide benefits in terms of habitat preservation/improvement; protection of the sport and commercial fishery; and the more efficient and cost-effective targeting of public funds. This will benefit all sectors of society, including those that have been historically underserved and disproportionately impacted.

☒ Project Addresses Education/Outreach

If So, Description of How:

Education and outreach are major components of this project, as evidenced by the proposed methodology. The Great Lakes Panel, which includes 35 members drawn from all sectors of the community involved in/affected by ANS, will have a major role in all project tasks. And, the Great Lakes Commission dissemination capability – via electronic and conventional means – will ensure that the larger community is apprised of project outcomes and opportunities to apply them.

Project Budget:

	Federal Share Requested (\$)	Applicant's Share (\$)
Personnel:	25,000	2,500
Fringe:	8,750	875
Travel:	2,000	0
Equipment:	0	0
Supplies:	0	0
Contracts:	0	0
Construction:	0	0
Other:	3,500	0
Total Direct Costs:	39,250	3,375
Indirect Costs:	13,038	1,181
Total:	52,288	4,556
Projected Income:	0	0

Funding by Other Organizations (Names, Amounts, Description of Commitments):

No other funding has been sought for the proposed project. However, existing Great Lakes Commission resources and staff expertise pertaining to Internet-based education/outreach and involvement with the Great Lakes Panel on Aquatic Nuisance Species will enhance cooperation and minimize the cost of the project. NOAA and the Great Lakes Sea Grant Network are potential funding partners and collaborators on this project. Sally Yozell, co-chair of the ANS National Task Force, has indicated strong support for this initiative.

Description of Collaboration/Community Based Support:

Through development of the Great Lakes Information Network and staffing support to the Great Lakes Panel on Aquatic Nuisance Species, the Commission has established longstanding partnerships with many organizations in the Great Lakes St. Lawrence region that address ANS issues. It is our intention to tap these varied resources and expertise when developing this Guide. Collaboration with the Great Lakes Sea Grant Network and U.S. Geological Survey, both significant producers of ANS information/education materials and maps, will be crucial to the success of this project.